

## ABSTRACT OF THE DISCLOSURE

Optically detectable data encoding layouts for surfaces includes a primary lattice and a secondary lattice formed in interstitial areas between plural points on the primary lattice and one or more markings located on points on the secondary lattice. The primary lattice defines the layout of the secondary lattice. The data is encoded according to the positions of the markings on the secondary lattice. The layout provides absolute or relative page position encoding because, when the markings are imaged and decoded, the decoded data corresponds to the position of the corresponding marking on the surface.